

(54) **SYSTEMS AND METHODS FOR  
ELECTRONIC DATA STORAGE  
MANAGEMENT**

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(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/118,218

(22) Filed: Jul. 17, 1998

**Related U.S. Application Data**

(60) Provisional application No. 60/053,119, filed on Jul. 18,  
1997.

(51) Int. Cl.<sup>7</sup> ..... G06F 12/00; G06F 13/00

(52) U.S. Cl. .... 711/165; 711/100; 711/170;  
711/202; 707/203

(58) Field of Search ..... 707/204, 203;  
711/165, 170, 203, 100, 200

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(57) **ABSTRACT**

Systems and methods for improved electronic data storage  
management that allow the file system to physically adapt  
and optimize to a variety of add-on hardware components  
(such as hard disks, removable drives, CD ROM drives, etc.)  
while virtually maintaining a stable system configuration  
from an application software point of view. The Redirector  
presents a virtual view of the file system by providing a  
virtual view of logical volumes. Through the use of a  
Redirector component, all application program file API's to  
the operating system are filtered; if the file, or directory is  
redirected, then the call is sent in a modified form to the  
operating system to its redirected physical location. The  
physical movement of files is accomplished through the use  
of a Migrator component. The Migrator makes a copy of the  
file, verifies the correctness of the copy, updates the redi-  
rector table, and then removes the physical file from its  
original location.